



V Series

MA9322-EHTVL

20MP Multi-Directional Panoramic Camera



Technical Specifications

System Information

CPU	Multimedia SoC (System-on-Chip)
Flash	1 GB
RAM	4 GB

Camera Specifications

Image Sensor	1/2.7" Progressive CMOS
Max. Resolution	2688x1920 (5MP) x 4
Lens Type	Motorized, Vari-focal, Remote Focus
Focal Length	f = 3.7 ~ 7.7 mm
Aperture	F1.9 ~ F2.9
Iris Type	Fixed Iris
Field of View	88.6° ~ 40.1° (Horizontal) 61.2° ~ 28.6° (Vertical) 115.5° ~ 49.5° (Diagonal)
Shutter Time	1/5 sec. to 1/32,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut filter	Yes
Illuminators	Built-in IR Illuminator up to 30 meters with Smart IR, IR LED*8
Minimum Illumination	0.035 lux @ F1.9 (Color) 0.005 lux @ F1.9 (B/W) 0 lux with IR illumination on
Tilt Range	0° ~ 105° each lens
Rotation Range	±90° each lens
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built in)

Storage	Seamless Recording to MicroSD/SDHC/SDXC card (1TB capacity supported) and recording to network-attached storage (NAS)
Built-in Installation Aids	Remote focus, Pixel calculator, Remote zoom

Video	
Compression	H.265, H.264, MJPEG
Maximum Frame Rate	15 fps @ (2688x1920) x 4 30 fps @ (2560x1440) x 4
Maximum Streams	2 streams each channel (Up to total 13 profiles)
S/N Ratio	60 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constrained bit rate control
Image Settings	General settings video title and time stamp overlay, video orientation (flip, mirror), day/night settings Illuminators illuminators, anti-overexposure Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, HLM, 3DNR Exposure BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control), AE speed adjustment, WDR Privacy mask Pixel calculator Scheduled profile settings

Audio	
Audio Capability	Two-way Audio (full duplex)
Compression	G.711, G.726
Interface	Built-in microphone External microphone input* External line output* * Requires AO-006 cable.
Effective Range	5 meters

Network	
Users	Live viewing for up to 20 clients
Security	Access list, Password protection, Digest authentication, HTTPS, IEEE 802.1x, User access log, User account management
Protocols	802.1X, ARP, CIFS/SMB, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS, UDP, UPnP
Interface	10BASE-T/100BASE-TX/1000BASE-T Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.

Solution Integration	
Video Motion Detection	Motion Detection (Five-window video motion detection)

Alarm and Event	
Event Trigger	Motion detection, Camera tampering detection, Audio detection*, Digital input*, Manual trigger, Periodical trigger, System boot, Recording notification, SD card life expectancy * Requires AO-006 cable
Event Action	Event notification via email, HTTP, FTP, NAS server, SD card, digital output, audio clip*, camera link File upload via email, HTTP, FTP, NAS server, SD card *Requires AO-006 cable

General	
Connectors	RJ-45 cable connector for 10/100/1000 Mbps Network/PoE connection Audio line input * Audio line output * AC 24V power input * Digital input * Digital output (DO+: 12V, 50mA; DO-: 30V, Open Drain, 1A)* * Requires AO-006 cable.
LED Indicator	System power and status indicator
Power Input	AC 24V*, IEEE 802.3at PoE Class 4 * Requires AO-006 cable.
Power Consumption	Max 25W
Dimensions	275 (D) x 118 (H) mm
Weight	2.7 kg
Certifications	EMC CE (EN 55032 Class A, EN 55024), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A) UKCA, ICES-003 Issue 7 Safety UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471) Environment IK10 (IEC 62262), IP66 (IEC 60529), NEMA (NEMA 250 Type 4X)
Operating Temperature	Starting Temperature: -30°C ~ 50°C (-22°F ~ 122°F) Working Temperature: -40°C ~ 50°C (-40°F ~ 122°F) (IR on)
Humidity	90% RH (non-condensing)
Warranty	60 months

System Requirements	
Operating System	Microsoft Windows 10/8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above Internet Explorer 10/11
Other Players	VLC: 1.1.11 or above

Included Accessories	
Packing Contents	Quick installation guide, alignment sticker, screw driver, screw pack, desiccant bag

DORI (EN 62676-4 Standard)	
Detection (25PPM/ 8PPF)	Wide: 74.0 m (242.8 ft) Tele: 153.9 m (504.9 ft)
Observation (63PPM/ 19PPF)	Wide: 29.3 m (96.1 ft) Tele: 61.1 m (200.5 ft)

Recognition (125PPM/ 38PPF)	Wide: 14.8 m (48.6 ft) Tele: 30.8 m (101.0 ft)
Identification (250PPM/ 76PPF)	Wide: 7.4 m (24.3 ft) Tele: 15.4 m (50.5 ft)